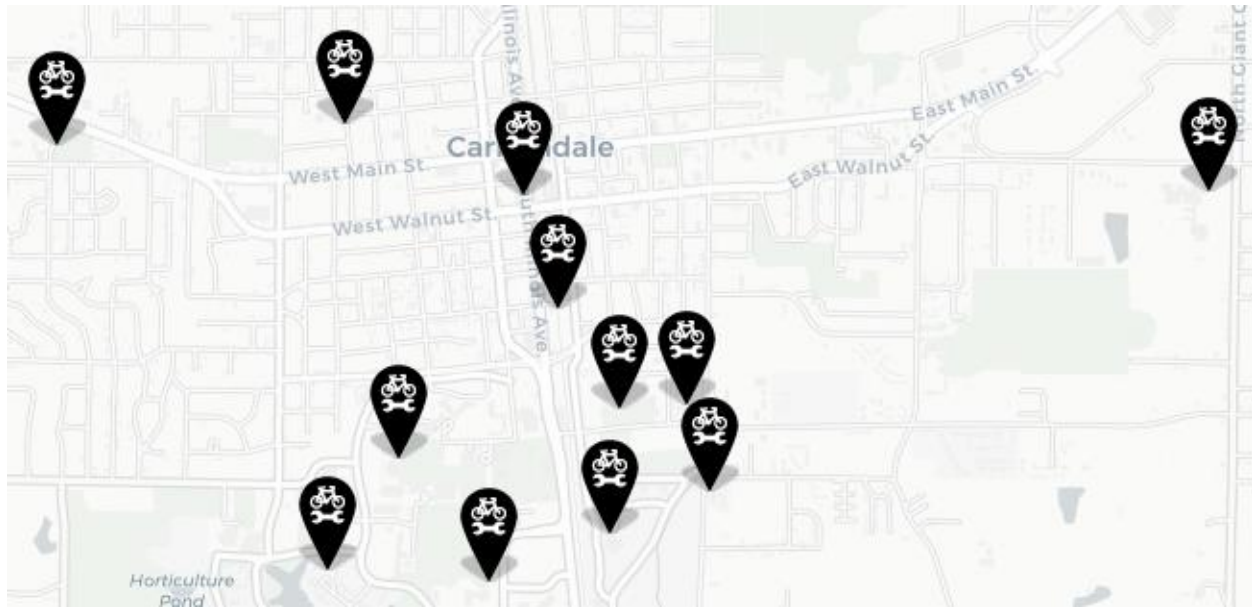


## Final Report Green Fund # 17SO114 Retrofit Current Fix-it Bike Stations.

This project is a follow-up to the Fixit stations located on and around the SIU Campus. As the head coordinator of Saluki Spokes I have steady access to what bicycle needs arise on campus. The largest portion of bike problems arise from flat tire. This can be the result of bike left in storage, punctured tires or temperature fluctuation. The need is bike pumps on the fix-it station is just that. This is probably the most used tool on the stations. The Air Head or chuck is the part that causes most of the challenges. If this part is not secured properly than the user can actually let more air out of the tire than they put in. This results in multiple attempts, and more wear and tear to the pump head and frustration and sometimes vandalism to the pump. We have 7 of these stations and only one original pump head is still working. The City of Carbondale has followed our lead and installed 5 more. All having the same problems.



This map is located at the Fixit company website.

When I first approached this grant. I had already replace the pump head at the Student Center, Lawson Hall and Thompson Point, and could see that they were wearing quickly and would soon need to be replace not lasting a whole school year. I figured there needs to be some feed back to the company about this problem it there has not been some already. I was InTouch with their rep quickly and passed up the small line to someone in charge, we both agree there is a huge user error factor but needed a better alternative to attaching the pump head to the inner tube valve stem. They admitted that they had an alternative and that he would do me a great favor in putting some kits together for \$45 each station.

From here I turned to the Green Fund to help finance this retrofit. I wrote the grant for \$375 dollars to cover the kits shipping a few local hardware supplies.

It was not long after I had received the grant that I checked the Fixit web page and found the new chuck with one review "Bad Does not Last"

So I start looking for alternatives and found some. I do not know who to give credit to but whoever at True Blood Hall installed this self-clipping Pump Head mad of all metal Thanks.

Yes I then found them on eBay and for a fraction of the cost. This is what we have been using. Still some are completely worn out after one year. Many look at them with no clue still how to pump up a tire and until iPhone or Android come up with an attachment/App I do not see this getting any better any time soon.

The metal air pump heads are cheaper and more durable, but not indestructible.



*Figure 1 Tire Inflator Tool Valve Stem Connector Air Chuck Lock Clip-On From eBay.*

So the retro-fit upgrade is not indestructible, infallible or fool proof. We have a huge learning curve to overcoming with the users. An alternative moving forward would be to have a few electric air pumps that the user can push down and hold on the inner tube valve stem so there would be no need to lock the air pump head/chuck to the stem. There is a Fixit station between Snyder and Grinnell. If this building is torn down it would be best to move it first. Also there is another Fixit by Trueblood. If this facility is no longer used another move to a more useful place would be best. The Fixit on the north side of Wall and Grand Apartments is in the best of shape as it is hidden out of sight.

I always look at repair over replace as a better way to conserve resources. I have stood near the bike Fixit station after work while waiting for a ride and watched frustrated individuals attempt to fill a tire. When I offer help I am usually met with no thanks, it's broken, I can handle this. It seems like personal pride is at stake, questioning one's mechanical knowledge of pumping a tire up.

I am reminded of the story of the child on the beach throwing starfish back into the ocean. A stranger happens by and tell the child why are you bothering to throw those few starfish back. There are thousands of them washed up on shore it hardly makes a difference. The Child replies "to that starfish it made all the difference."

Sustainable efforts sometimes feel like the many starfish on the beach. So much to do so much missed, so few saved. Perhaps the seeds have been planted and the next generation will do more make a difference. "By small and simple things are great things brought to pass". At young ages individuals form lifelong opinions and then become leaders and voters that make big differences.

We have to keep being the example. Keep up the great work you are doing.

Sincerely,  
Ron Dunkel  
Student Center Craft Shop  
Saluki Spokes  
Bike Watch  
Bird House Factory